

1. How can NESDIS improve their services and data?

- NESDIS should make it easy for users to perform multiple queries on multiple data sets from same or different agencies or line offices, and NESDIS should specify the timing of the backlogs generated by the queries, and communicate this with users.
- NCDC should be able to archive from backup media when primary is not available or defective. This is important to users who need validated data
- Some data takes longer to get to users than other data. Data center should reduce lead time, especially for back orders
- Users should not have to wait for data that arrives late to data centers
- File types: some are very slow to download, even for high speed users
 - Also need to be aware of dial up users
 - Pdf file – form generation
- Users should be queried on period of data requested
- Data certification time is variable from each line office. This creates an issue of timing for users
- Radar Data
- L Options
 - Validity tests
 - Communication backup
- Not Editing data – improve time lines
- Ask user about which period of data

Issue: Data archived by NCDC is not their data, for the most part (NWS operational data)

- NESDIS should make multiple versions of the data – raw and edited, and both should be easily identifiable
 - This has effects on speed – how long it takes NESDIS to get out the data
 - Tier product offering- different levels of products for different levels of users.
- Data accessibility and availability catered to different types of users
 - We need the tools and resources to get the data out on a consistent basis
 - We need to get the line offices/agencies to agree on a standard (NIST?)
- NESDIS needs to improve the updating of the historical metadata
 - Ex: Users have no idea some surface stations get relocated, this severely affects climate data

Should the data centers set a common format for their products?

- Using GIS tools
- Are the tools used going to be smart enough to understand the different datasets?
- At the very least, the data should be georeferenced to go into GIS

Questions?

- Where has some Coast Guard weather data gone? How do we access same now?
- How do I get certified high seas, offshore, and coastal zone forecasts? (NWS SSMC)
- Is there a req. at NCDC to archive some lost climatic atlases of the world? (Update from 1977 issues) (NCDC has the data but need budgetary requirement and job definition, Tom Ross)

2. How can NESDIS Centers best provide for customer feedback?

- Communication with users: **need to keep users updated on current and new data acquisitions**
 - E-mail
 - Newsletters
 - Web Site Updates

Ways users would like to communicate:

- Phone
- Monthly summary of changes (posted to website) - "What's New" or "What's Coming Up"
- Leave summary of changes up on the site as a record
- Point of contact for specific issues
- Technical interchange meetings
- Users' conferences and Users' Groups (web groups/boards, FAQ, or e-mail listservs)
- Provide a user requirements form (users specify needs and ways to receive the data)
- Online, moderated user forums
- Survey on specific data sets when ordered

Users should receive some kind of answer even if there is no immediate resolution

NESDIS should broker relationships between users and industry

Collect a "wish list" from users for new data and technology

Some problems:

- E-mail is great but it alienates users and makes it difficult for users to find a phone number with a live person

Suggestion: NESDIS should have a human contact that can meet with users

- Have a routine follow up session to develop and update a set of requirements for NESDIS by users
- How does NESDIS solicit overall community for input into archives?
 - Proprietary data – users like to see that

3. Technology of the future -- How can it help?

What are some future ideas?

- Volume and variety of new data – hundreds of different satellites transmitting many data streams
- Bandwidth increasing
- Storage capacity increasing
- Focus on the clear mission/not on all the other things: Make data available when we want it, spend critical resources to make it faster and more complete.
- Focus on operational systems – way information is made available – Evolution/Revolution
- Government cannot suddenly change ways to make information available

While prices are dropping for storage, there will still be a significant cost with respect to mass storage, automation, facilities, people, software, etc. that may still be too expensive for NOAA

- Management will need to address this issue to create a sustainable IT architecture to handle the petabytes of storage needed
- The number of users will increase and so will the level of sophistication
- We need to be careful in assuming that one big system of dumping data to users will work – it won't

Amount of data – should NESDIS just focus on the critical data or should we integrate everything?

4. New data acquisitions: What data should NESDIS archive?

All data used by the federal government (ocean, atmosphere, earth, and space) should be archived and easily accessible to everyone.

There are many datasets collected by fed/state/local government, private, and others. Can the data centers provide a link to those sources? (NASA, Earth Resources, Aerosols, etc...)

- If there are new sources that are being integrated into NWS forecasts then NCDC should archive it
- Would it be beneficial for the NOAA (CLASS) system access other archival systems?
- Problems exist between robust, reliable data and “rooftop” data
- Archival of state data, mesonets, cooperative agreements
- Web based metadata including new data and notice of changes
- There is a need to archive new DMSP data at NGDC
- Need for archiving current-depths at NGDC or NODC
- Is there a need for data centers to archive research data?
- MEDCARS/ACARS should be archived at NCDC when received from NWS Gateway
- New data archived should be easily accessible to customers
- Some private and some public knowledge of where to go.

Is there a need for integrated datasets, which contains multiple data sources? (ex: NEXRAD, Satellite, Obs, etc)

- Using existing databases across the agencies
- Visualization Tools – using GIS to overlay data in layers or integrated
- Users should demand that we provide the interoperable platforms and standards

Will NCDC acquire new data from Rutgers?

Does NCDC plan to incorporate climate atlases?

5. New products and services: What should we plan for?

- Plan for data sets that cut across multiple platforms, multiple sensors, multiple geographic boundaries and multiple agencies so that users can access all data with one entry point
- Overlay and composite data sets
- Plan for different sets of tools for different users, or one tool for a variety of users
- Offer metadata capabilities to allow users to apply new manipulations to the data without having to reprocess the entire archive (ex: new calibration tables)
- Plan for data sets that cut across multiple platforms, multiple sensors, multiple geographic boundaries and multiple agencies so that users can access all data with one entry point

6. What other issues need to be addressed?

- NCDC has lots of older data that is very difficult to access
 - Get older data into an overall format that is available
 - There is a modernization project underway to convert the paper data into electronic
 - Users want access to older electronic data, why re-digitize paper data that came from electronic sources?
- Common format
 - Should the data centers move to a common format for all data archived?
- There should be an on-going dialogue between the data centers and users
- Public/Private partnership
- Cost/Free
- Is there a need for an integrated product which contains: NXRAD, Satellite and Surface OPS?